



OUR COMMITMENT TO SUSTAINABILITY

R E D U C I N G O U R C A R B O N F O O T P R I N T



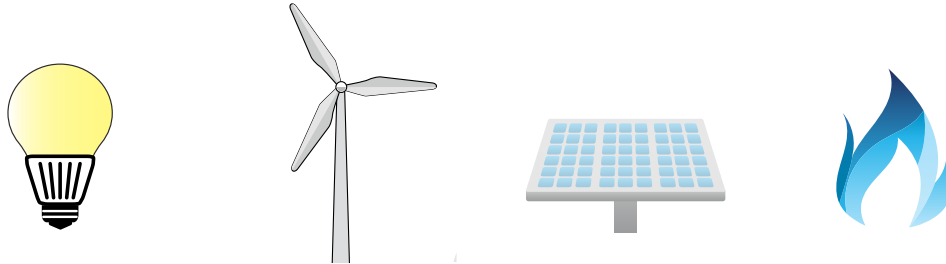
SOUTHERN MINNESOTA
MUNICIPAL POWER AGENCY

www.smmpa.com



OUR COMMITMENT TO SUSTAINABILITY

Southern Minnesota Municipal Power Agency (SMMPA) and its 18 member utilities are committed to environmental stewardship and sustainability. Our efforts in this area range from using energy wisely, operating our facilities in as efficient a manner as possible, controlling emissions and diversifying our generation portfolio.



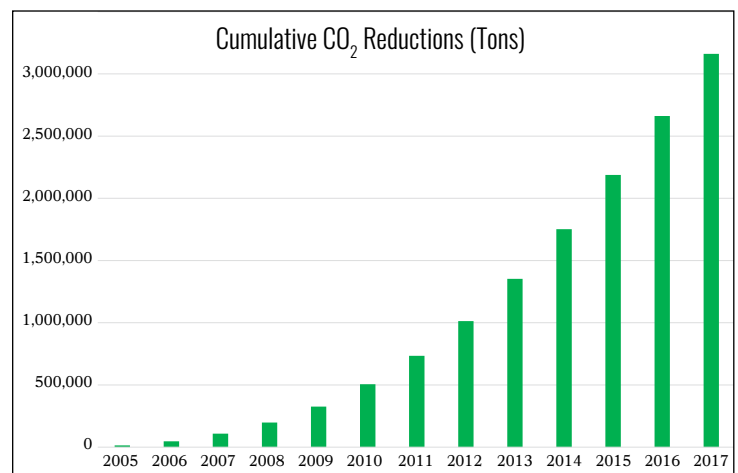
The positive environmental impacts of our efforts are as diverse as the scope of the efforts themselves, but one measure is carbon footprint. We understand that climate change is a global concern and we are transitioning to a less carbon-intensive generation portfolio to help address the potential impacts of climate change while also focusing on our responsibility to provide reliable and affordable electricity to our members. Highlighted below are some of the major efforts we have undertaken since 2005 and the impact that has had on SMMPA's carbon emissions.

Energy Efficiency

SMMPA and its member utilities are recognized leaders in implementing cost-effective energy efficiency as evidenced by having received four federal Environmental Protection Agency ENERGY STAR® Awards; in 2003, 2004, and 2010 for Excellence in Energy Efficiency, and in 2016 as an ENERGY STAR® Partner of the Year.



Based on estimated emissions rates and expected lifetime savings from energy efficiency measures, SMMPA and its members' energy efficiency efforts since 2005 have saved over 6.3 million megawatt hours (MWh) of energy resulting in CO₂ reductions of nearly 3.2 million tons. That's the equivalent of 676,860 passenger vehicles driven for one year or the carbon sequestered by more than 3.7 million acres of U.S. forests in one year.*



*Based on EPA's Greenhouse Gas Equivalencies Calculator

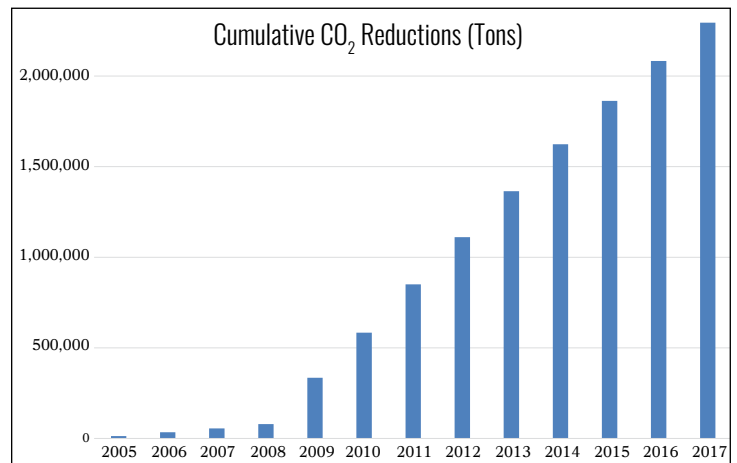
Wind Energy



SMMPA owns and operates two .950 megawatt (MW) and two 1.650 MW wind turbines located in member community Fairmont and two 1.650 MW wind turbines located in member community Redwood Falls. In 2009, SMMPA entered into a contract with EDF Renewables, Inc. (EDF) to purchase all power generated from 67 1.5 MW turbines located near Dexter, Minnesota.

In 2017, SMMPA entered into a second contract with EDF for 100 MW of wind capacity, beginning in 2020, from the 50 turbine Stoneray wind farm to be constructed in Pipestone and Murray counties in southwest Minnesota.

Since 2005, SMMPA has included over 3.1 million MWhs of wind energy in its generation portfolio resulting in 2.3 million less tons of CO₂ emissions based on estimated emissions rates. That's the equivalent of over 5.6 billion less miles driven by passenger cars or almost 500,000 passenger vehicles driven for one year or almost 5.3 million less barrels of oil burned.

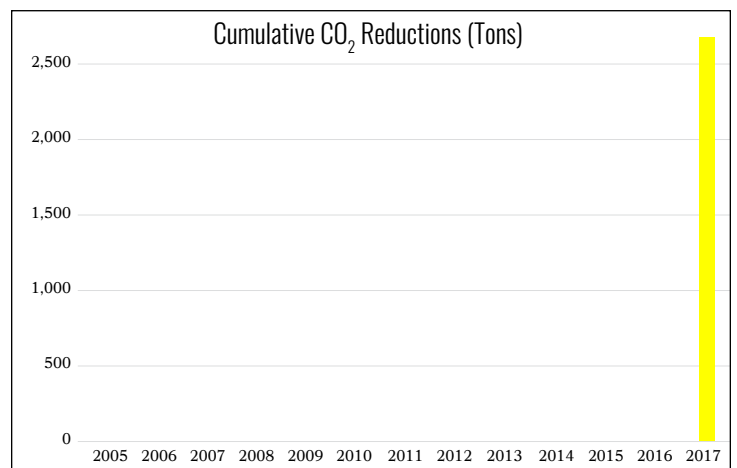


Solar Energy



The first solar component of SMMPA's energy portfolio came on-line in June 2017. SMMPA has entered into a 20-year contract with Enerparc, Inc. for the output from a 5 MW solar array located near member community Owatonna. This facility is also serving the SolarChoice Community Solar programs currently being offered in five member communities. SMMPA is also buying the output from four 4 kW and one 10 kW solar arrays located in member communities.

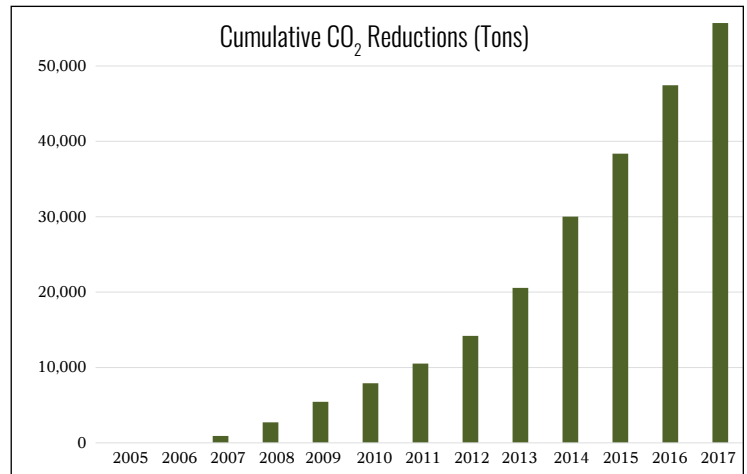
While it is still early in SMMPA's journey with solar energy, the energy created in 2017 alone, resulted the same amount of CO₂ reduction as switching over 90,000 incandescent lamps to LEDs based on estimated emissions rates



Other Renewables

SMMPA's power supply also includes waste-to-energy and landfill gas. While not a large component of our energy portfolio, they do play a role in reducing carbon emissions.

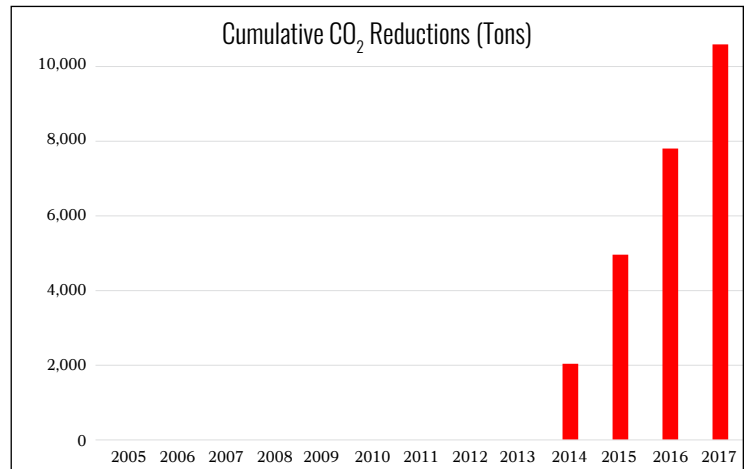
Since 2005, based on estimated emissions rates the other renewable energy sources have resulted in the reduction of almost 56,000 tons of CO₂, or about as much as 2,775 garbage trucks of waste recycled instead of landfilled or avoiding the burning of more than 304 railcars' worth of coal burned.



Natural Gas

SMMPA has added 63 MW of natural-gas fired generation to its fleet with the addition of its 25 MW plant in Fairmont in 2014 and the 38 MW Owatonna plant in late 2017. Natural gas-fired power plants emit CO₂ at about half the rate of coal plants and about 27% less than the overall generation mix in the MISO wholesale generation market in which SMMPA operates.

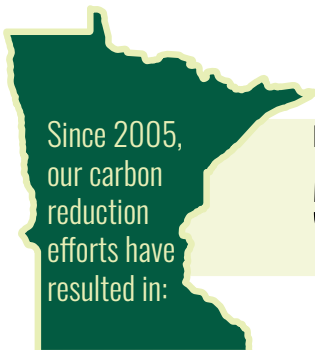
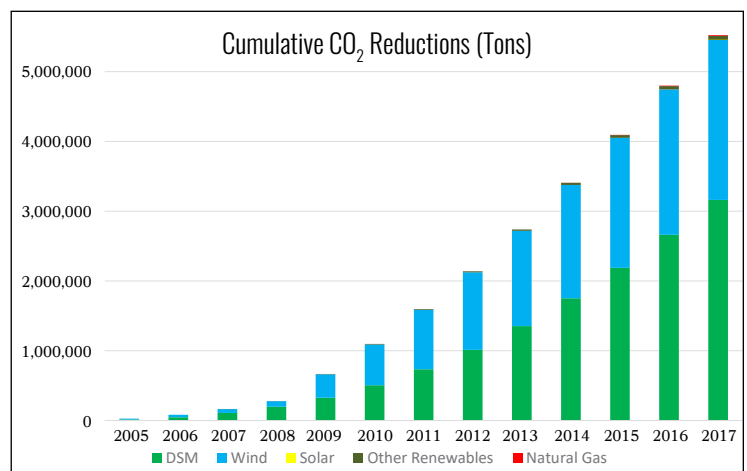
Since 2005, SMMPA's addition of natural gas generation has resulted in the same reduction in CO₂ as 3,692 tons of waste recycled instead of landfilled or almost 1.2 million less gallons of gasoline burned based on estimated emissions rates.



It All Adds Up


Taken together, SMMPA has made a major commitment to sustainability and in the process, has significantly reduced its carbon footprint. SMMPA met the State of Minnesota's goal of a 15% reduction carbon emissions by 2015 and projects it will meet the goal of a 30% reduction by 2025. All of this, while still providing safe, reliable, and cost-competitive energy to its 18 member communities.

Since 2005, collectively these efforts have reduced 5.5 million tons of CO₂ emissions – the same impact as nearly 1.2 million passenger cars from the road or the CO₂ sequestered in over 6.5 million acres of U.S. forests in a year.




Reducing
5.5 million
tons of CO₂ emissions

=

Eliminating 
1.2 million
passenger cars from the road

or

Planting 
6.5 million
acres of trees

For more information go to www.smmpa.com